

EXHIBIT F

'049 Patent	Claim Elements	NCT's Mapping	Inadequacies of NCT's Claim Chart
Claim 1	<p>In a network of digital computers that includes a first plurality of Network Distributed Cache ("NDC") sites, each NDC site including an NDC that has an NDC buffer, a method for projecting images of a stored dataset from an NDC server terminator site into a second plurality of NDC client terminator sites in response to requests to concurrently access such stored dataset transmitted from a third plurality of client sites respectively to the second plurality of NDC client terminator sites, the method comprising the steps of:</p>	<p>CacheFlow infringes this claim under 35 U.S.C. §271(b) and/or (c). CacheFlow 7000 accelerators are combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Operation of the CacheFlow 7000 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966, Figure 3 on CF 007423 and the Figure on CF 006028-comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators.</p> <p>The computer network also includes one or more server accelerators-NDC server terminator site-such as a CacheFlow 7000 accelerator (See CF 006028). The client accelerators and the CacheFlow 7000 accelerator include a processor and a memory (See CF 006030) configured to be a</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including:</p> <p>An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 7000 never stores the "stored data" that is always on the web server.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents they rely on state: CF006030 does not provide a description of a processor or memory within a SA 7000.</p> <p>CF006027-30 does not show the memory of the SA 7000 being allocated as a cache.</p>

	(a) the NDC receiving the request to access data in the stored dataset;	<p>The shared cache (NDC) of the CacheFlow 7000 accelerator receives a request to access data in a stored dataset.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p>	<p>NCT has not identified the structure of an NDC within the SA 7000.</p> <p>NCT has not shown where or how the SA 7000 is an NDC Server Terminator Site.</p> <p>NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base their mapping on, clearly shows that the SA 7000 is a single cache shared by multiple servers. The shared cache is not a part of the SA 7000, but is the entire SA 7000.</p>
	b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there	<p>The shared cache (NDC) of the 7000 accelerator checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data.</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will</p>	<p>NCT has not provided any evidence that that the SA 7000 is an NDC Server Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 7000, or where a projected image exists within the SA 7000.</p>

		<p>serve the content for the web servers." CF 007456</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the CA 6000 series.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112...If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is not the NDC server terminator site for the stored dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site;</p>	<p>If the memory (NDC buffer) of the CacheFlow 7000 accelerator does not contain a copy (projected image) of all the requested data, and if this accelerator (NDC site) is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this site transmits a request for the requested data downstream to another accelerator (NDC site) that is closer to server accelerator (NDC server terminator site) for the dataset or to the server accelerator (NDC server terminator site).</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See a/so</i> CF</p>	<p>NCT has not shown where or how the SA 7000 is an NDC Server Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 7000, or where a projected image exists within the SA 7000.</p> <p>Furthermore, NCT has not identified structure within the accused device that transmits a request <u>downstream</u> to another SA 7000.</p> <p>Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.</p>

server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 series.

"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...

At a step 221, similar to Step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278

	<p>(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is the NDC server terminator site for the stored dataset, the NDC of the NDC server terminator site accessing the stored dataset to project an image of the requested data into the NDC buffer of the NDC server terminator site;</p>	<p>The shared cache (NDC) of the 7000 accelerator, acting as a server terminator site, accesses the stored dataset to project a copy (projected image) of the requested data into its memory (NDC buffer).  "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.  "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.  "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.  The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 series.  ""At a step 223, similar to step 213, the root cache 111 determines if the web</p>	<p>NCT does not identify any structure within the SA 7000 that can store the "stored dataset" as defined in the asserted patent.</p>
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		<p>object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112...because there has a been a root cache miss...</p> <p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278-009279.</p>	
	<p>(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;</p>	<p>The shared cache (NDC) of the CacheFlow 7000 accelerator, acting as a server terminator site for the stored dataset, continues to check its memory (NDC buffer) to determine whether it contains a copy (projected image) of all requested data, and if such memory does not contain a projected image of all data requested from the stored dataset, the shared cache (NDC) of the CacheFlow 7000 accelerator continues to accesses the stored dataset until its memory buffer receives a copy of</p>	<p>NCT does not identify any structure within the SA 7000 that stores the "stored dataset" as defined in the asserted patent.</p>

	<p>(f) each successive NDC site, having obtained a projected image of all the requested data, returning the requested data upstream to the NDC site from which the NDC site received the request until the requested data arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site into the second plurality of NDC client terminator sites; and</p>	<p>After the CacheFlow 7000 accelerator, acting as an NDC server terminator site, obtains a copy (projected image) of all the requested data, the shared cache (NDC) of that CacheFlow 7000 accelerator sends the data upstream, either directly or through intermediate NDC sites (such as other CacheFlow 7000 accelerators), to the client accelerator (NDC client terminator site). The CacheFlow 7000 accelerator (NDC server terminator site), and any intermediate NDC sites (accelerators), retain a copy of the returned data so that it (they) may subsequently and concurrently transmit a copy of such data to two or more client accelerators (NDC client terminator sites). ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF</p>	<p>NCT does not identify any structure within the SA 7000 that can return requested data upstream to another NDC site.</p> <p>Nor has NCT identified any structure within the SA 7000 that can retain a copy of the returned data.</p> <p>NCT has not identified any structure in the SA 7000 for concurrently projecting images into a plurality of client terminator sites.</p>
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		007456. "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. See a/s/o CF007447.	
	(g) the NDC client terminator site, upon receiving the requested data, returning the requested data to the client site that requested access to the stored dataset.	Upon receiving the requested data, the-client accelerator (NDC client terminator site), such as a CacheFlow 6000 accelerator, sends the data to the client that requested it. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
Claim 16	A network of digital computers that includes a first plurality of client sites which request access to a stored dataset that is stored at a location that can be accessed through the network, the network comprising: a second plurality of NDC sites, the stored dataset whose access is requested by the client sites being stored at an NDC server terminator site, a request from the client sites for access to the stored dataset being received by a third plurality of NDC client terminator sites, each NDC site including:	Cacheflow infringes this claim under 35. U.S.C. § 271(b) and/or (c). CacheFlow 7000 accelerators are combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Inclusion and operation of the CacheFlow 7000 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.  The preamble identifies a network of digital computers, including:  An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.  NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 7000 never stores the "stored data" that is always on the web server.  NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment

		<p>007447, the Figure on CF 005965 to CF 005966, Figure 3 on CF 007423 and the Figure on CF 006028- comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators. The computer network also includes one or more server accelerators-NDC server terminator site- such as a CacheFlow 7000 accelerator (See CF 006028). The client accelerators and the CacheFlow 7000 accelerator include a processor and a memory (See CF 006030) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 006027 to CF 006030). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 7000 accelerator acting as a</p>	<p>Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents they rely on state: CF006030 does not provide a description of a processor or memory within a SA 7000.</p> <p>CF006027-30 does not show the memory of the SA 7000 being allocated as a cache.</p>
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		<p>server terminator site. If the buffers within the CacheFlow 7000 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 7000 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 7000 accelerator, can subsequently transmit the data to one or more computers within the network."The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow clQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF 007490.</p> <p>"The SA-7000 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users." CF 007456.</p> <p>"...caches will be</p>	
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		<p>deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site...To accommodate this unique application, the SA-7000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p><i>See</i> CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model). <i>See</i> CF 006030 and CF 009233 (specifying the size of the RAM for each 7000 Series accelerator model).</p>	
	(a) an NDC that has an NDC buffer;	A CacheFlow 7000 accelerator has a shared	NCT fails to meet the specificity requirements of L.R. 3-1 for many

		<p>cache (NDC) includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 006030 and CF 009233 (specifying the memory size for each 7000 Series accelerator).</p>	<p>reasons.</p> <p>NCT has not shown that buffers exist within the SA 7000. Thus, without identifying any buffer in the SA 7000, NCT's chart does not map a buffer within the SA 7000 to an NDC buffer.</p> <p>Determining what an NDC buffer includes is a claim construction issue, since an NDC buffer includes a channel, which the SA 7000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the SA 7000 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the SA 7000 that caches.</p>
	<p>(b) means for the NDC to receive the request to access the stored dataset;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6</p> <p>The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the SA- 1000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	
	<p>(c) means for the NDC to check the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there, wherein:</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of the requested data. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>007456.</p> <p>"To accommodate this unique application, the ... CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 series.</p> <p>" At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112. ...If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(c)(i) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if this NDC site is not the NDC server terminator site for the stored dataset, the NDC includes means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) CacheFlow 7000 accelerator perform1s the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472, <i>See also</i> CF 007447.</p> <p>"A reverse proxy or</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 series.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(c)(ii) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if this NDC site is the NDC server terminator site for the stored dataset, the NDC including means for accessing the stored</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The shared cache (NDC) of the CacheFlow 7000 accelerator performs acting as the server accelerator (NDC server terminator site) the claimed function of accessing the stored</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without</p>



	<p>dataset to project an image of the requested data into the buffer of this NDC; and</p>	<p>dataset to project an image of the requested data into its memory (NDC buffer) This site incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 Series.</p> <p>"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred</p>	<p>identifying what subroutine within the CacheOS software performs the claimed function.</p>
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		<p>embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112 ...because there has been a root cache miss...</p> <p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278-009279.</p>	
	<p>(c)(iii) if the NDC buffer of an NDC site contains a projected image of all requested data, the NDC including means for returning the data requested from this NDC site upstream to the NDC site from which this NDC site received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the data. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

	<p>the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site into the third plurality of NDC client terminator sites; and</p>	<p>No. 5,611,049, for performing this claimed function.</p> <p>The memory (NDC buffer) and software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of retaining a copy of the returned data. The CacheFlow 7000 accelerator includes a pool 128 of buffers 129 and incorporates software, the same as or equivalent to the buffer search routine 126 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web</p>	
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		<p>site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	
	<p>(d) means for the NDC client terminator site to return the requested data to the client site that requested access to the stored dataset.</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache of the client accelerator (NDC client terminator site) performs the claimed function of returning the requested data to the client site. The accelerator sites incorporate software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	<p>NCT makes no showing that the NDC is a shared cache of the SA 7000.</p> <p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine126, and server interface routines 104,, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
'914 Patent			
Claim 1	<p>In a network of digital computers that includes a plurality of Network Distributed Cache ("NDC")</p>	<p>CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c). A CacheFlow 7000 accelerator is combined in a computer network of its customers, such as internet service providers,</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including:</p> <p>An NDC Server Terminator Site</p>

	<p>sites, each NDC site including an NDC that has an NDC buffer, a method for projecting an image of a stored dataset from an NDC server terminator site into an NDC client terminator site in response to a request to access such dataset transmitted from a client site to the NDC client terminator site, the method comprising the steps of:</p>	<p>broadband service providers, or network providers-such as Akamai. Operation of the CacheFlow 7000 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966, Figure 3 on CF 007423 and the Figure on CF 006028--comprises a computer acting as a client site, which makes a request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator site-such as a CacheFlow 7000 accelerator (See CF 006028). The client accelerator and the CacheFlow 7000 accelerator include a processor and a memory (See CF 006030) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 006027-CF 006030). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator</p>	<p>(storing a stored data set) There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 7000 never stores the "stored data" that is always on the web server.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents they rely on state: CF006030 does not provide a description of a processor or memory within a SA 7000.</p> <p>CF006027-30 does not show the memory of the SA 7000 being allocated as a cache.</p>
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		<p>receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 7000 accelerator acting as a server terminator site. If the buffers within the CacheFlow 7000 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 7000 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 7000 accelerator, can subsequently transmit the data to one or more computers within the network.</p> <p>"The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow cIQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF 007490.</p> <p>"The SA- 7000 services up to 95% of a site's inbound requests, delivering content directly to users and offloading</p>	
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		<p>Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. ..By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to</p>	
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		<p>other caches." CF 008097.</p> <p>"The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site. ...To accommodate this unique application, the SA- 1000's hardware architecture and CacheOS™ Sever Edition software are optimized to handle heavy transaction loads." See CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model).</p> <p>See CF 006030 and CF 009233 (specifying the size of the RAM for each 7000 Series accelerator model).</p>	
	(a) the NDC receiving the request to access data in the stored dataset;	<p>The shared cache (NDC) of the CacheFlow 7000 accelerator receives a request to access data in a stored dataset.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p>	<p>NCT has not identified the structure of an NDC within the SA 7000.</p> <p>NCT has not shown where or how the SA 7000 is an NDC Server Terminator Site.</p> <p>NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base this mapping on, clearly shows that the SA 7000 is a single cache shared by multiple servers. The shared cache is not a part of the SA 7000, but is the entire SA 7000.</p>
	(b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the dataset is already present there;	<p>The shared cache (NDC) of the 7000 accelerator checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data.</p>	<p>NCT has not provided any evidence that that the SA 7000 is an NDC Server Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the</p>



		<p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software optimize to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 series.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112...if the web object 133 is present, the method 200 proceeds with the next step. " CF 009278.</p>	<p>structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 7000, or where a projected image exists within the SA 7000.</p> <p>NCT has not shown that the SA 7000 is an NDC Server Terminator Site, that it has an NDC, that is has an NDC buffer, or that it has a projected image.</p>
	<p>(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is not the NDC server terminator site for the dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer</p>	<p>If the memory (NDC buffer) of the CacheFlow 7000 accelerator does not contain a copy (projected image) of all the requested data, and if this accelerator (NDC site) is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this site transmits a request for the requested data downstream to</p>	<p>NCT has not shown that the SA 7000 is an NDC Server Terminator Site, that it has an NDC, that is has an NDC buffer, or that it has a projected image. Furthermore, NCT has not shown that the accused device transmits a request <u>downstream</u>. Nor does NCT show transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.</p> <p>NCT has not shown where or how the SA 7000 is an NDC Server</p>

	<p>to the NDC server terminator site for the dataset than the present NDC site;</p>	<p>another accelerator (NDC site) that is closer to server accelerator (NDC server terminator site) for the dataset or to the server accelerator (NDC server terminator site).  "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site."  CF 007472. See also CF 007447.  "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.  "To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.  The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 Series.  "At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because</p>	<p>Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 7000, or where a projected image exists within the SA 7000.</p> <p>Furthermore, NCT has not identified structure within the accused device that transmits a request <u>downstream</u> to another SA 7000.</p> <p>Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.</p>
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		<p>there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is the NDC server terminator site for the dataset, the NDC of this NDC site accessing the stored dataset to project an image of the requested data into its NDC buffer;</p>	<p>The shared cache (NDC) of the 7000 accelerator, acting as a server terminator site, accesses the stored dataset to project a copy (projected image) of the requested data into its memory (NDC buffer).</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the... CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 Series.</p> <p>" At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred</p>	<p>NCT does not identify any structure within the SA 7000 that can store the "stored dataset" as defined in the asserted patent.</p>

		<p>embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112...because there has been a root cache miss...</p> <p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278-009279</p>	
	<p>(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;</p>	<p>The shared cache (NDC) of the CacheFlow 7000 accelerator, acting as a server terminator site for the stored dataset, continues to check its memory (NDC buffer) to determine whether it contains a copy (projected image) of all requested data, and if such memory does not contain a projected image of all data requested from the stored dataset, the shared cache (NDC) of the CacheFlow 7000 accelerator continues to access the stored dataset until its memory buffer receives a copy of all the requested data.</p> <p>"ciQ Server Accelerators accelerate and scale web</p>	<p>NCT does not identify any structure within the SA 7000 that stores the "stored dataset" as defined in the asserted patent.</p>

		<p>farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. See also CF 007447.</p>	
	<p>(f) each successive NDC site, having obtained a projected image of all the requested data, returning data requested from it upstream to the NDC site from which it received the request until the requested data arrives at the NDC client terminator site; and</p>	<p>After the CacheFlow 7000 accelerator, acting as an NDC server terminator site, obtains a copy (projected image) of all the requested data, the shared cache (NDC) of that CacheFlow 7000 accelerator sends the data upstream, either directly or through intermediate NDC sites (such as CacheFlow 7000 accelerators), to the client accelerator (NDC client terminator site). The CacheFlow 7000 accelerator (NDC server terminator site), and any</p>	<p>NCT does not identify any structure within the SA 7000 that can return requested data upstream to another NDC site.</p> <p>Nor has NCT identified any structure within the SA 7000 that can retain a copy of the returned data.</p> <p>NCT has not identified any structure in the SA 7000 for concurrently projecting images into a plurality of client terminator sites.</p>

		<p>intermediate NDC sites (accelerators), retain a copy of the returned data so that it (they) may subsequently and concurrently transmit a copy of such data to two or more client accelerators (NDC client terminator sites).</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers," CF 007456,</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p>	
	(g) the NDC client terminator site, upon receiving the requested data, returning the requested data to the client site.	<p>Upon receiving the requested data, the client accelerator (NDC client terminator site), such as a CacheFlow 6000 accelerator, sends the data to the client that</p>	

		requested it. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
Claim 9	A network of digital computers that includes a client site which requests access to a dataset that is stored at a location that can be accessed through the network, the network comprising:	CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c). A CacheFlow 7000 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Inclusion and operation of the CacheFlow 7000 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966, Figure 3 on CF 007423 and the Figure on CF 006028- comprises a computer acting as a client site, which makes a request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator site-such as a CacheFlow 7000 accelerator (See CF 006028). The client accelerator and the CacheFlow 7000 accelerator include a processor and a memory	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including:</p> <p>An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 7000 never stores the "stored data" that is always on the web server.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents they rely on state: CF006030 does not provide a description of a processor or memory within a SA 7000.</p> <p>CF006027-30 does not show the memory of the SA 7000 being allocated as a cache.</p>

		<p>(See CF 006030) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 006027 to CF 006030). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer-client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 7000 accelerator acting as a server terminator site. If the buffers within the CacheFlow 7000 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 7000 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 7000 accelerator, can subsequently transmit the data to one or more computers within the</p>	
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		<p>network.</p> <p>"The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow cIQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF 007490.</p> <p>"The SA- 7000 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. " By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.</p>	
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		<p>" An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships.</p> <p>A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches."</p> <p>CF 008097.</p> <p>"The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site...To accommodate this unique application, the SA-7000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads."</p> <p>CF 006028.</p> <p>See CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model).</p> <p>See CF 006030 and CF 009233 (specifying the size of the RAM for each 7000 Series accelerator model).</p>	
	<p>a plurality of NDC sites, the dataset whose access is requested by the client site being stored at an NDC server terminator site, a request from the client site for access to the dataset being received by an NDC client terminator site, each NDC site including:</p>	<p>The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966, Figure 3 on CF 007423 and the Figure on CF 006028- comprises a computer acting as a client site, which makes a</p>	<p>There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site.</p> <p>There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. The server terminator site is the owner of the "original data," not a projected image as stated in NCT's chart.</p>

		<p>request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator site-such as a CacheFlow 7000 accelerator (See CF 006028). The client accelerator and the CacheFlow 7000 accelerator include a processor and a memory (See CF 006030) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 006027 to CF 006030). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 7000 accelerator acting as a server terminator site. If the buffers within the CacheFlow 7000 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If</p>	<p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers.</p>
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		<p>not, the CacheFlow 7000 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 7000 accelerator, can subsequently transmit the data to one or more computers within the network.</p> <p>"The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow cIQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF 007490.</p> <p>"The SA- 7000 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF</p>	
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		<p>007456.  "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site."  CF 007472. <i>See also</i> CF 007447.  "An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.  "The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site....To accommodate this unique application, the SA-7000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads."  CF 006028.  <i>See</i> CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model).  <i>See</i> CF 006030 and CF 009233 (specifying the size of the RAM for each 7000 Series accelerator model).</p>	
	(a) an NDC that has an	A CacheFlow 7000	NCT fails to meet the specificity

	NDC buffer;	<p>accelerator has a shared cache (NDC) includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 006030 and CF 009233 (specifying the memory size for each 7000 Series accelerator).</p>	<p>requirements of L.R. 3-1 for many reasons.</p> <p>NCT has not shown that buffers exist within the SA 7000. Thus, without identifying any buffer in the SA 7000, NCT's chart does not map a buffer within the SA 7000 to an NDC buffer. Determining what an NDC buffer includes is a claim construction issue, since an NDC buffer includes a channel, which the SA 7000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the SA 7000 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the SA 7000 that caches.</p>
	(b) means for the NDC to receive the request to access the dataset;	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6</p> <p>The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
	(c) (c) means for the NDC to check the NDC buffer at this NDC site to determine if a projected image of data requested from the dataset is already present there wherein:	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of the requested data.</p> <p>The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers," CF 007456.</p> <p>"To accommodate this unique application, the... CacheOS™ Server Edition software are optimized to handle heavy transaction loads. "</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>The 7000 Series incorporates the same patent-pending CacheOS™ software as in the CA-6000 Series.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112...If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(c)(i) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if this NDC site is not the NDC server terminator site for the dataset, the NDC including means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the dataset than the present NDC site;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6</p> <p>The software of the shared cache (NDC) CacheFlow 7000 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>



		<p>Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as in the 6000 Series.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(c)(ii) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if this NDC site is the NDC server terminator site for the dataset, the NDC including means for accessing the dataset to project an image of the requested data into its NDC buffer; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The shared cache (NDC) of the CacheFlow 7000 accelerator performs acting as the server accelerator (NDC server terminator site) the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This site incorporates software, the same as or equivalent to file system interface</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p> routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. See also CF 007447.</p> <p> " A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p> "To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p> The 7000 Series incorporates the same patent-pending CacheOS™ software as the 6000 Series.</p> <p> "At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...</p> <p> "At a step 223, similar to</p>	
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		<p>step 213, the root cache determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(c)(iii) if the NDC buffer of an NDC site contains a projected image of all requested data, the NDC including means for returning data requested from it upstream to the NDC site from which it received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) of the CacheFlow 7000 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the data. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>backend servers." CF 005965.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	
	(d) data return means for returning the requested data from the NDC client terminator site to the client site.	<p>This claim element is - subject to interpretation under 35 U.S.C. § 112, ¶6</p> <p>The software of the shared cache of the client accelerator (NDC client terminator site) performs the claimed function of returning the requested data to the client site. The accelerator sites incorporate software, the same as or equivalent to the client intercept</p>	<p>NCT makes no showing that the NDC is a shared cache of the SA 7000.</p> <p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine 126, and server interface routines 104,</p>

		<p> routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p> "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p> "To accommodate this unique application, the CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028</p>	<p> described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
'452 Patent			
Claim 13	<p> A Network Distributed Cache ("NDC") site adapted for inclusion into a network of digital computers, the network including a client terminator site that is adapted for receiving a request from a client for access to data stored in a dataset located at a server terminator site, the server terminator site also being included in the network and being accessible by the client terminator site via the network, the NDC site comprising:</p>	<p> CacheFlow's manufacture and sales of its 7000 accelerators infringes this claim under 35 U.S.C. § 271(a). A CacheFlow 7000 accelerator is a Network Distributed Cache ("NDC") site that is adapted for inclusion into its customers' computer networks, such as those operated by internet service providers, broadband service providers, or network provider-such as Akamai. The accelerator is adapted to be included within a computer network-such as those shown in Figure 3 on page CF 005949, the Figure on CF 005965 to CF 005966, Figure 2 on CF 007446, Figure 3 on CF 007446 and the Figure on CF 006028-, which in addition to the CacheFlow 7000 accelerator comprises a computer acting as client site that requests data from the CacheFlow 7000</p>	<p> NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p> The preamble identifies a network of digital computers, including:</p> <p> An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 7000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p> NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 7000 never stores the "stored data" that is always on the web server.</p> <p> NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p>

		<p>accelerator. A CacheFlow 7000 accelerator includes a processor and a memory (See CF 006030) configured to be an NDC site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 006027 to CF 006030 and CF 009230 to CF 009233). The CacheFlow 7000 accelerator further includes computer programs (See CF 006028 and CF 009231), which together with the cache create an NDC. The CacheFlow 7000 accelerator is configured such that upon receiving a request for data, the computer programs in the accelerator checks whether the buffers have such data. If so, the accelerator is configured to transmit the requested data back to the requesting computer-client site and/or other NDC site, such as another accelerator (See CF 007456 and CF 007447). Otherwise, if the buffers do not have the requested data, the accelerator is configured to access such data from a downstream NDC site, such as another accelerator, or from an accelerator acting as an NDC server terminator site (See CF 007456 and CF 006028).</p> <p>"The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow cIQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF</p>	<p>NCT misrepresents what the documents they rely on state: CF006030 does not provide a description of a processor or memory within a SA 7000.</p> <p>CF006027-30 does not show the memory of the SA 7000 being allocated as a cache.</p>
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		<p>007490.</p> <p>"The SA-7000 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. See <i>a/so</i> CF 007447.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships.</p> <p>A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object</p>	
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		<p>is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site. ...To accommodate this unique application, the SA-7000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>See CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model).</p> <p>See CF 006030 and CF 009233 (specifying the memory size for each 7000 Series accelerator model).</p>	
	(a) an NDC having an NDC buffer and including;	<p>A CacheFlow 7000 accelerator has an NDC that includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 006030 and CF 009233 (specifying the memory size for each 7000 Series accelerator model).</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>NCT has not shown that buffers exist within the SA 7000. Thus, without identifying any buffer in the SA 7000, NCT's chart does not map a buffer within the SA 7000 to an NDC buffer.</p> <p>Determining what an NDC buffer includes is a claim construction issue, since an NDC buffer includes a channel, which the SA 7000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the SA 7000 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the SA 7000 that caches.</p>
	(a)(i) means for	This claim element is	This element is a means plus



	receiving requests for access to data stored in a dataset; and	<p>subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 7000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"To accommodate this unique application, the ... CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p>	<p>function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
	(a)(ii) means for the NDC to check the NDC buffer to determine when a projected image of valid data responsive to at least a portion of requests therefor is already present in the NDC buffer wherein:	<p>This claim element is subject to interpretation under 35 U.S.C. § 112 ¶6.</p> <p>The software of the NDC of the CacheFlow 7000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image)</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without</p>

		<p>of the requested data. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the ... CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as in the 6000 Series.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112. ...If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	<p>identifying what subroutine within the CacheOS software performs the claimed function.</p>
	<p>(a)(ii)(A) A. if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is not the server</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC CacheFlow 7000</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in</p>

	<p>terminator site for the dataset, the NDC including means for transmitting a request for data via the network from the NDC site downstream to another site closer to the server terminator site for the dataset than the NDC site;</p>	<p>accelerator performs the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed-function.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the... CacheOS™ Server Edition software are optimized to handle heavy loads." CF006028. The 7000 Series incorporates the same patent-pending CacheOS™ software as</p>	<p>the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
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		<p>in the 6000 Series.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(a)(ii)(B). if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is the server terminator site for the dataset, the NDC including means for accessing the dataset to project a valid image of the requested data into the NDC buffer;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>When the CacheFlow 7000 accelerator is the server accelerator (NDC server terminator site), the software of the NDC of the CacheFlow 7000 accelerator performs the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer).</p> <p>This site incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the ... CacheOS™ Server Edition software are optimized to handle heavy loads." CF006028. The 7000 Series incorporates the same patent-pending CacheOS™ software as in the 6000 Series.</p> <p>" At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leave cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(a)(ii)(C) if the NDC buffer contains a projected image of all requested data, and if the NDC site is not the client terminator site which received the request from the client, the NDC including means for returning data requested from the NDC site upstream to the site from which the NDC received the request, whereby through a succession of such returns of data</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 7000 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the data. The CacheFlow 7000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs</p>

	<p>from one site to the next upstream site the requested data ultimately arrives at the client terminator site; and</p>	<p>client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream through aggregation sites to the provider's central site." CF 007472. <i>See also</i> CF 007447.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the ... CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	<p>the claimed function.</p>
	<p>(a)(ii)(D) if the NDC buffer contains a valid</p>	<p>This claim element is subject to interpretation</p>	<p>NCT makes no showing that the NDC is a shared cache of the SA</p>

	<p>projected image of all requested data, and if the NDC site is the client terminator site which received the request from the client, the NDC including data return means for returning the requested data from the NDC buffer to the client site.</p>	<p>under 35 U.S.C. § 112, ¶6.</p> <p>If the CacheFlow 7000 accelerator is the client accelerator (NDC client terminator site), the software of the NDC of the CacheFlow 7000 accelerator performs the claimed function of returning the requested data to the client site. The accelerator sites incorporate software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.</p> <p>"By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the ...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p>	<p>7000.</p> <p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine 126, and server interface routines 104,, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
'234 Patent			
Claim 1	<p>A network-infrastructure cache for providing proxy services to a plurality of client workstations concurrently requesting access to data stored on a server; the client workstations and the server being interconnected by a</p>	<p>"The CacheFlow Server Accelerator 7000 Series, an integral component of the CacheFlow ciQ Content Delivery Architecture, consists of high performance Internet appliances that offload Web servers from content delivery tasks." CF 006028.</p>	

	<p>network via which client workstations may transmit network-file-services-protocol requests to the server, and via which the server transmits network-file-services-protocol responses to requesting client workstations; the network- infrastructure cache comprising:</p>	<p>"The SA-7000 services up to 95% of a site's inbound requests. delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 006028.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. <i>See a/so</i> CF007447.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A</p>	
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		<p>cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The SA- 7000 Series is expressly tuned for the workload of a high-traffic web site...To accommodate this unique application, the SA-7000's hardware architecture and CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>See CF 006030 and CF 009233 (specifying the different disk drives for each 7000 Series accelerator model).</p> <p>See CF 006030 and CF 009233 (specifying the memory size for each 7000 Series accelerator model).</p>	
	<p>a network interface that connects to the network for providing a hardware and software interface to the network through which the network-infrastructure cache receives and responds to network-file-services-protocol requests from client workstations for data for which the network-infrastructure cache provides proxy services;</p>	<p>The CacheFlow 700 accelerator includes hardware and software, and the hardware includes a memory, a portion of which serves as a cache for storing cached data. The software configures the cache to be a proxy cache for a plurality of workstations such that the cache may be checked to determine if cached data is present. The hardware and software of the proxy cache include an interface, the same as or equivalent to network interface 102, that allows it to receive and respond to network-file- protocol requests from a plurality of client workstations.</p> <p>"A reverse proxy or</p>	<p>NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the SA 7000.</p>

		<p>server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>"To accommodate this unique application, the ...CacheOS™ Server Edition software are optimized to handle heavy transaction loads." CF 006028.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS™ software as the CA-6000 uses.</p> <p>"At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.</p>	
	<p>a file-request service-module for receiving via said network interface network-file- services- protocol requests transmitted by the client workstations for data for which the network- infrastructure cache provides proxy services, and for transmitting to client workstations via said network interface network-file- services- protocol responses to the network-file- services- protocol</p>	<p>A CacheFlow 7000 accelerator includes software, the same as or equivalent to the service-module 112, for receiving network-file-services- protocol requests from and for transmitting network interface network -file- services-protocol responses to client workstations.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to</p>	<p>NCT has not provided a single authority to support this allegation. NCT has not identified a structure within the file-request service module within the SA 7000.</p>

	requests;	web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. ..By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
	a cache from which said file- request service-module retrieves data that is included in the network- file-services- protocol responses that said file- request service-module transmits to the client workstations; and	The CacheFlow 700 accelerator includes hardware and software, and the hardware includes memory, a portion of which serves as a cache, that stores cached data. The software configures the cache to be a proxy cache for a plurality of workstations. " A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users." CF 007456. "...caches will be deployed across the network." CF 007472.	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the SA 7000.
	a file-request generation- module for transmitting to the server via said network interface network -file- services-protocol requests for data specified in network- file- services-protocol	The CacheFlow 7000 accelerator includes software, the same as or equivalent to the request- module 132, for transmitting a network- file- services-protocol request for data, missing from the cache, to a	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the SA 7000.

	<p>requests received by said file-request service-module that is missing from said cache, for receiving from the server network-file- services- protocol responses that include data missing from said cache, and for transmitting such missing data to said cache for storage therein.</p> <p>.</p>	<p>downstream accelerator or the server, for receiving the missing data, and for transmitting the missing data to the cache.</p> <p>"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.</p> <p>The 7000 Series incorporates the same patent-pending CacheOS<sup>TM</sup> software as the 6000 series.</p> <p>"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a flow point 230, the root cache 111 is unable to omit the web object 133 from its memory or storage 112 ...because</p>	
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		<p>there has a been a root cache miss...</p> <p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278-009279.</p>	
Claim 2	The network-infrastructure cache of claim 1 wherein client workstations transmit network-file-services-protocol requests using Hyper-Text Transfer Protocol ("HTTP").	<p>The client workstations transmit network-file-services-protocol requests to the CacheFlow 7000 accelerator using Hyper-Text Transfer Protocol ("HTTP")</p> <p>"Can accelerate both public (HTTP) and private (HTTPS) content through integrated SSL functionality." CF 007492.</p>	NCT has not shown that the SA 7000 is a client workstation that transmits requests using HTTP.
Claim 3	3. The network-infrastructure cache of claim 1 wherein the server transmits network-file-services-protocol responses using HTTP	<p>The server transmits network-file- services-protocol responses to the CacheFlow 7000 accelerator using Hyper-Text Transfer Protocol ("HTTP")</p> <p>"Can accelerate both public (HTTP) and private (HTTPS) content through integrated SSL functionality." CF 007492.</p>	NCT has not shown that the SA 7000 is a server that transmits responses using HTTP.